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|---|---|
| HAND, MELANIE JO | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/753,974 | DAMAY ET AL. | |
| | Examiner | Art Unit | |
| | MELANIE J. HAND | 3761 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *27 February 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-20 and 22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20,22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed February 27, 2008 have been fully considered but they are not persuasive.

With respect to arguments regarding the application of the prior art of Becker after appeal, a consideration of a reference by examiner does not constitute a statement that that piece of prior art is better than the prior art actually applied. If that were true, every time an examiner chose prior art from an IDS to apply against a claim, it would amount to examiner always picking the worst prior art and admitting to it. The fact that a reference is considered or in any way recognized as relevant in an Office action does not preclude it from being applied against the claims at a later date.

With respect to arguments regarding the rejection of claims 1-10 and 14-17: Applicant argues with respect to independent claims 1-3 that the cover layer of Becker does not have a quantity of hydrophilic fibers at the top surface because the cover layer is a pulp/conjugate fiber mix sandwiched between two veneers of conjugate fiber. This is not persuasive because "a quantity" can include zero and the limitation "a quantity of hydrophilic fibers" is interpreted as encompassing zero hydrophilic fibers, and thus the prior art of Becker anticipates this limitation in claims 1-3. There is a quantity of hydrophobic fibers and a quantity of hydrophilic fibers at the top surface of the cover layer of Becker wherein the quantity of hydrophobic fibers is greater than the quantity of hydrophilic fibers, as required by claims 1-3. Further, the cover layer taught by becker as a layer of the mixture with two hydrophobic veneers is simply a preferred embodiment and was not relied upon in the rejection. Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred

embodiments. See *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). ". A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). See also *Celeritas Technologies Ltd. v. Rockwell International Corp.*, 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522-23 (Fed. Cir. 1998). Claims 1-3 are also obvious over Becker for this same reason.

Applicant's arguments with regard to dependent claims 4-10 and 14-17 have been fully considered but are not persuasive, as applicant's arguments depend entirely on arguments regarding the rejection of claims 1-3, which have been addressed *supra*.

With respect to arguments regarding the rejection of claims 11-13 and 22: Applicant argues that examiner only cited one weight percentage for the hydrophilic fibers and one for the hydrophobic fibers. Applicant further argues that hydrophobic top surfaces as taught by Becker are known in the art and the reason, though not explicitly stated in Becker, for having a hydrophobic top surface or cover in a pantiliner or sanitary napkin is to prevent rewet. Though this is true, cover layers having hydrophilic top surfaces or a balance of hydrophilic and hydrophobic fibers to allow quick fluid passage while preventing rewet are equally known in the art. However, official notice was not taken by examiner in the rejection, and the theory of the rejection was based upon the position that the amount of hydrophobic fibers being a result-effective variable. Applicant partially addresses the argument by examiner that the hydrophobic fiber quantity is a result effective variable by disagreeing that one of ordinary skill in the art would be motivated to modify the quantity of hydrophobic fibers. However, this argument does not fully address examiner's position that the quantity of hydrophobic fibers is a result-effective variable and in fact applicant's arguments support examiner's position by stating that a greater quantity of hydrophobic fibers prevents rewet.

Applicant further argues that examiner's statement that the claimed weight percent ranges for the hydrophilic and hydrophobic fibers must apply everywhere but the top surface of the cover layer is untrue. Examiner disagrees. Claim 22 recites that the hydrophilic microfibers comprise greater than 65% and up to 80% of the microfibers based upon a total weigh of the mixture of microfibers in the cover layer and the hydrophobic microfibers comprise the remainder. In order to be consistent with any of claims 1-3 from which claim 22 depends, the cover layer, which comprises a mixture of hydrophilic microfibers and hydrophobic microfibers, must have a uniform distribution of said hydrophilic and hydrophobic fibers, as no other manner of distribution is recited in claims 1-3 and the claims recite that the cover layer as a whole comprises one mixture. Thus, in order for the top surface of the cover layer to have a greater quantity of hydrophobic fibers that hydrophilic fibers, the weight percentage of hydrophobic fibers in the mixture that forms the whole of the cover layer must be recited in claim 22 as being greater, not less, than the quantity of hydrophilic fibers, which is what is currently recited.

In light of the lack of persuasive arguments against the rejections of the claims, all grounds of rejection are maintained.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-10 and 14-17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Becker (U.S. Patent No. 4,657,538).

With respect to **claim 1:** Becker teaches a disposable absorbent liner 10 for use in a crotch portion of underwear comprising: a cover layer in the form of outer cover 18 having a top surface and an opposite bottom surface, the cover layer 18 comprising a mixture of hydrophilic microfibers in the form of wood pulp fibers and hydrophobic microfibers in the form of polyester/polyethylene conjugate fibers, wherein a quantity of hydrophilic microfibers and hydrophobic microfibers are located at the top surface. The term "a quantity" is interpreted herein to encompass zero as a viable quantity. Becker teaches "Example 1" of a liner of the instant invention wherein on the body-facing side of the liner (i.e. the top surface) a quantity of hydrophobic microfibers located at the top surface (76% by weight of the fiber mixture) is larger

than a quantity of hydrophilic microfibers (24% by weight of the fiber mixture of the wood pulp fibers) located at the top surface based on a total weight of the mixture of microfibers in the cover layer. Liner 10 comprises a removable backing layer in the form of release strip 24 and a liquid impermeable baffle layer 20 having a top surface and an opposite bottom surface, with the baffle layer 20 being disposed between the cover layer 18 and the backing layer 24. Becker teaches that the liner of "Example 1" has a maximum thickness of 5.3 mm, which overlaps the range disclosed by applicant serving as the quantitative definition of the term "low profile". (See Specification, Page 2, lines 32-35)

With regard to the limitation "an Absorbent Capacity in the range of about 2 grams to about 10 grams", Becker discloses identical materials for the hydrophilic microfibers (rayon) and hydrophobic fibers (polyethylene) to those disclosed by applicant for the claimed hydrophilic and hydrophobic microfibers. Absorbent capacity is a function of the absorbent materials used and the claimed cover layer recited in claim 1 is solely responsible for the claimed absorbent capacity inasmuch as it is the only element recited in claim 1 that is capable of absorption. If the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. Therefore, the absorbent liner of Becker has an absorbent capacity within the claimed range. Alternatively, it would be obvious to one of ordinary skill in the art to modify the liner of Becker so as have an absorbent capacity within the claimed range with a reasonable expectation of success, since the materials disclosed by applicant and Becker for the cover layer responsible for absorption are identical. When the structure or composition recited in the reference is substantially identical to that of the claimed invention, claimed properties or functions are presumed to be inherent. See MPEP §2112-2112.01. A prima facie case of either anticipation or obviousness has been established when the reference discloses all of the limitations of a claim except for a property or function and the examiner cannot

determine whether or not the reference inherently possesses properties that anticipate or render obvious the claimed invention but has a basis for shifting the burden of proof to the applicant. See *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

With respect to **claim 2:** Becker teaches a disposable absorbent liner 10 for use in a crotch portion of underwear comprising: a cover layer in the form of outer cover 18 having a top surface and an opposite bottom surface, the cover layer 18 comprising a mixture of hydrophilic microfibers in the form of wood pulp fibers and hydrophobic microfibers in the form of polyester/polyethylene conjugate fibers, wherein a quantity of hydrophilic microfibers and hydrophobic microfibers are located at the top surface. The term "a quantity" is interpreted herein to encompass zero as a viable quantity. Becker teaches "Example 1" of a liner of the instant invention wherein on the body-facing side of the liner (i.e. the top surface) a quantity of hydrophobic microfibers located at the top surface (76% by weight of the fiber mixture) is larger than a quantity of hydrophilic microfibers (24% by weight of the fiber mixture of the wood pulp fibers) located at the top surface based on a total weight of the mixture of microfibers in the cover layer. Liner 10 comprises a removable backing layer in the form of release strip 24 and a liquid impermeable baffle layer 20 having a top surface and an opposite bottom surface, with the baffle layer 20 being disposed between the cover layer 18 and the backing layer 24. Becker teaches that the liner of "Example 1" has a maximum thickness of 5.3 mm, which overlaps the range disclosed by applicant serving as the quantitative definition of the term "low profile". (See Specification, Page 2, lines 32-35)

With regard to the limitation "an Absorbent Capacity in the range of about 2 grams to about 10 grams", Becker discloses identical materials for the hydrophilic microfibers (rayon) and hydrophobic fibers (polyethylene) to those disclosed by applicant for the claimed hydrophilic and

hydrophobic microfibers. Absorbent capacity is a function of the absorbent materials used and the claimed cover layer recited in claim 1 is solely responsible for the claimed absorbent capacity inasmuch as it is the only element recited in claim 1 that is capable of absorption. If the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. Therefore, the absorbent liner of Becker has an absorbent capacity within the claimed range. Alternatively, it would be obvious to one of ordinary skill in the art to modify the liner of Becker so as have an absorbent capacity within the claimed range with a reasonable expectation of success, since the materials disclosed by applicant and Becker for the cover layer responsible for absorption are identical. When the structure or composition recited in the reference is substantially identical to that of the claimed invention, claimed properties or functions are presumed to be inherent. See MPEP §2112-2112.01. A prima facie case of either anticipation or obviousness has been established when the reference discloses all of the limitations of a claim except for a property or function and the examiner cannot determine whether or not the reference inherently possesses properties that anticipate or render obvious the claimed invention but has a basis for shifting the burden of proof to the applicant. See *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

With respect to **claim 3:** Becker teaches a disposable absorbent liner 10 for use in a crotch portion of underwear comprising: a cover layer in the form of outer cover 18 having a top surface and an opposite bottom surface, the cover layer 18 comprising a mixture of hydrophilic microfibers in the form of wood pulp fibers and hydrophobic microfibers in the form of polyester/polyethylene conjugate fibers, wherein a quantity of hydrophilic microfibers and hydrophobic microfibers are located at the top surface. The term “a quantity” is interpreted herein to encompass zero as a viable quantity. Becker teaches “Example 1” of a liner of the

instant invention wherein on the body-facing side of the liner (i.e. the top surface) a quantity of hydrophobic microfibers located at the top surface (76% by weight of the fiber mixture) is larger than a quantity of hydrophilic microfibers (24% by weight of the fiber mixture of the wood pulp fibers) located throughout the cover layer and at the top surface based on a total weight of the mixture of microfibers in the cover layer. Liner 10 comprises a removable backing layer in the form of release strip 24 and a liquid impermeable baffle layer 20 having a top surface and an opposite bottom surface, with the baffle layer 20 being disposed between the cover layer 18 and the backing layer 24. The absorbent liner 10 meets all of the remaining claim limitations of claim 1 and thus inherently and necessarily has a low profile. Becker teaches that the liner of "Example 1" has a maximum thickness of 5.3 mm, which overlaps the range disclosed by applicant serving as the quantitative definition of the term "low profile". (See Specification, Page 2, lines 32-35)

With regard to the limitation "an Absorbent Capacity in the range of about 2 grams to about 10 grams", Becker discloses identical materials for the hydrophilic microfibers (rayon) and hydrophobic fibers (polyethylene) to those disclosed by applicant for the claimed hydrophilic and hydrophobic microfibers. Absorbent capacity is a function of the absorbent materials used and the claimed cover layer recited in claim 1 is solely responsible for the claimed absorbent capacity inasmuch as it is the only element recited in claim 1 that is capable of absorption. If the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. Therefore, the absorbent liner of Becker has an absorbent capacity within the claimed range. Alternatively, it would be obvious to one of ordinary skill in the art to modify the liner of Becker so as have an absorbent capacity within the claimed range with a reasonable expectation of success, since the materials disclosed by applicant and Becker for the cover layer responsible for absorption are identical. When the structure or composition

recited in the reference is substantially identical to that of the claimed invention, claimed properties or functions are presumed to be inherent. See MPEP §2112-2112.01. A prima facie case of either anticipation or obviousness has been established when the reference discloses all of the limitations of a claim except for a property or function and the examiner cannot determine whether or not the reference inherently possesses properties that anticipate or render obvious the claimed invention but has a basis for shifting the burden of proof to the applicant. See *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

With respect to **claim 4:** The top surface of the baffle layer 20 is secured to the bottom surface of the cover 18. (Col. 3, lines 24-27)

With respect to **claim 5:** The backing layer 24 is removably secured to the bottom surface of the baffle layer 20 via securement to adhesive strips 22 positioned on said baffle layer 20. (Col. 3, lines 55-57, Col. 4, 7-9)

With respect to **claim 6:** The top surface of the baffle layer is secured to the bottom surface of the cover 18 and the backing layer 24 is removably secured to the bottom surface of the baffle layer 20 via removable securement to adhesive strips 22. (Col. 3, lines 55-57, Col. 4, 7-9)

With respect to **claim 7:** With regard to the limitation "the Absorbent Capacity is between about 3 grams and about 9 grams", the liner of Becker meets all of the remaining claim limitations. Absorbent capacity and Absorbent Intake rate as disclosed are functions of the absorbent materials used. When the structure or composition recited in the reference is substantially identical to that of the claimed invention, claimed properties or functions are presumed to be

inherent. See MPEP §2112-2112.01. A prima facie case of either anticipation or obviousness has been established when the reference discloses all of the limitations of a claim except for a property or function and the examiner cannot determine whether or not the reference inherently possesses properties that anticipate or render obvious the claimed invention but has a basis for shifting the burden of proof to the applicant. See *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

With respect to **claim 8:** With regard to the limitation "the Absorbent Capacity is between about 4 grams and about 8 grams", the liner of Becker meets all of the remaining claim limitations. Absorbent capacity and Absorbent Intake rate as disclosed are functions of the absorbent materials used. When the structure or composition recited in the reference is substantially identical to that of the claimed invention, claimed properties or functions are presumed to be inherent. See MPEP §2112-2112.01. A prima facie case of either anticipation or obviousness has been established when the reference discloses all of the limitations of a claim except for a property or function and the examiner cannot determine whether or not the reference inherently possesses properties that anticipate or render obvious the claimed invention but has a basis for shifting the burden of proof to the applicant. See *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

With respect to **claim 9:** With regard to the limitation "an Absorbent Intake Rate of less than about 20 seconds", the liner of Becker meets all of the remaining claim limitations. Absorbent Intake rate as disclosed is a function of the absorbent materials used. When the structure or composition recited in the reference is substantially identical to that of the claimed invention, claimed properties or functions are presumed to be inherent. See MPEP §2112-2112.01. A prima facie case of either anticipation or obviousness has been established when the reference discloses all of the limitations of a claim except for a property or function and the examiner

cannot determine whether or not the reference inherently possesses properties that anticipate or render obvious the claimed invention but has a basis for shifting the burden of proof to the applicant. See *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

With respect to **claim 10:** With regard to the limitation "an Absorbent Intake Rate of less than about 10 seconds", the liner of Becker meets all of the remaining claim limitations. Absorbent Intake rate as disclosed is a function of the absorbent materials used. When the structure or composition recited in the reference is substantially identical to that of the claimed invention, claimed properties or functions are presumed to be inherent. See MPEP §2112-2112.01. A prima facie case of either anticipation or obviousness has been established when the reference discloses all of the limitations of a claim except for a property or function and the examiner cannot determine whether or not the reference inherently possesses properties that anticipate or render obvious the claimed invention but has a basis for shifting the burden of proof to the applicant. See *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

With respect to **claim 14:** The liner 10 comprises a periphery. Becker does not explicitly teach at least one fold line defining a central area and two side areas, wherein the liner may be adjusted in size by folding the liner along the fold line, however the liner is considered herein to foldable along any fold line, given the flexible materials and thinness of the article. Therefore it would be obvious to one of ordinary skill in the art to modify the article of Becker such that the liner comprises at least one fold line that necessarily defines a central area and two side areas with a reasonable expectation of success. The limitation "wherein the liner may be adjusted in size" is considered functional language that bears little patentable weight, as the limitation describes what the at least one fold line does rather than what it is.

With respect to **claim 15:** An underwear attaching material in the form of adhesive strips 22 is provided on at least a portion of the bottom surface of the baffle layer 20. (Col. 3, lines 55-57)

With respect to **claim 16:** The cover layer 18 is a nonwoven integral matrix of the mixture of microfibers inasmuch as Becker teaches that the outer cover layer 18 is comprised of outer layers of heat fusible fibers with the wood pulp and bicomponent fibers sandwiched therebetween. (Col. 3, lines 13-15)

With respect to **claim 17:** As can be seen in Figs. 1 and 2, the flowers are formed as depressed areas. The microfibers at the top surface of the cover layer 18 are formed into elongated machine direction (MD) peaks (defined within petal boundaries of the petals extending parallel to the longitudinal direction of the article) and valleys (the petal boundaries substantially parallel to the longitudinal direction of the article), spaced apart from each other in the cross direction (CD).

4. Claims 11-13 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker ('538).

With respect to **claim 11:** The absorbent liner 10 has a density of about 0.059 g/cc, which does not fall within the claimed range of greater than about 0.2 grams per cubic centimeter. However, Becker teaches identical materials for the hydrophilic fibers and substantially identical materials for the hydrophobic fibers. The ratio of hydrophobic fibers to hydrophilic fibers by weight of the fiber mixture determines the rate of absorbency, as evidenced by Table 1 of Becker, which

shows whether liquid is permitted to pass through a flow retarding means, which is simply a web of hydrophobic material. The comparison is made between liners containing the hydrophobic web versus those that do not. Those that do have the web present have a significantly lower strikethrough probability, thus this data in Table 1 is evidence that the presence of hydrophobic material, e.g. fibers or webs, slows absorbency significantly. Thus it is interpreted herein that the amount of hydrophobic material is a result effective variable, and thus also is the density of the article, which changes as the ratio of hydrophobic fibers to hydrophilic fibers is changed. It would be obvious to one of ordinary skill in the art to modify the article of Becker such that the article has the claimed density with a reasonable expectation of success to control the rate of absorbency through the instant cover layer. Further, it has been held that the discovery of an optimum value of a result-effective variable in a known process is ordinarily within the skill of the art. See *In re Boesch and Slaney*, 205 USPQ 215 (C.C.P.A. 1980)

With respect to **claim 12:** The absorbent liner 10 has a density of about 0.059 g/cc, which does not fall within the claimed range of greater than about 0.225 grams per cubic centimeter. However, Becker teaches identical materials for the hydrophilic fibers and substantially identical materials for the hydrophobic fibers. The ratio of hydrophobic fibers to hydrophilic fibers by weight of the fiber mixture determines the rate of absorbency, as evidenced by Table 1 of Becker, which shows whether liquid is permitted to pass through a flow retarding means, which is simply a web of hydrophobic material. The comparison is made between liners containing the hydrophobic web versus those that do not. Those that do have the web present have a significantly lower strikethrough probability, thus this data in Table 1 is evidence that the presence of hydrophobic material, e.g. fibers or webs, slows absorbency significantly. Thus it is interpreted herein that the amount of hydrophobic material is a result effective variable, and thus

also is the density of the article, which changes as the ratio of hydrophobic fibers to hydrophilic fibers is changed. It would be obvious to one of ordinary skill in the art to modify the article of Becker such that the article has the claimed density with a reasonable expectation of success to control the rate of absorbency through the instant cover layer. Further, it has been held that the discovery of an optimum value of a result-effective variable in a known process is ordinarily within the skill of the art. See *In re Boesch and Slaney*, 205 USPQ 215 (C.C.P.A. 1980)

With respect to **claim 13:** The absorbent liner 10 has a density of about 0.059 g/cc, which does not fall within the claimed range of greater than about 0.25 grams per cubic centimeter. However, Becker teaches identical materials for the hydrophilic fibers and substantially identical materials for the hydrophobic fibers. The ratio of hydrophobic fibers to hydrophilic fibers by weight of the fiber mixture determines the rate of absorbency, as evidenced by Table 1 of Becker, which shows whether liquid is permitted to pass through a flow retarding means, which is simply a web of hydrophobic material. The comparison is made between liners containing the hydrophobic web versus those that do not. Those that do have the web present have a significantly lower strikethrough probability, thus this data in Table 1 is evidence that the presence of hydrophobic material, e.g. fibers or webs, slows absorbency significantly. Thus it is interpreted herein that the amount of hydrophobic material is a result effective variable, and thus also is the density of the article, which changes as the ratio of hydrophobic fibers to hydrophilic fibers is changed. It would be obvious to one of ordinary skill in the art to modify the article of Becker such that the article has the claimed density with a reasonable expectation of success to control the rate of absorbency through the instant cover layer. Further, it has been held that the discovery of an optimum value of a result-effective variable in a known process is ordinarily within the skill of the art. See *In re Boesch and Slaney*, 205 USPQ 215 (C.C.P.A. 1980)

With respect to **claim 22:** Becker teaches that the hydrophilic microfibers comprise 24% by weight of the fiber mixture and the hydrophobic fibers comprise the remainder, i.e. 76% by weight of the fiber mixture. Thus Becker does not anticipate the claimed ranges. However since Becker teaches that the percentages are uniform throughout the outer cover layer 18 and some areas of the cover layer 18 incur a greater volume of exudates than others, it would be obvious to one of ordinary skill in the art to modify the article of Becker such that the overall weight percentages of hydrophilic and hydrophobic fibers are maintained but vary throughout the article so as to anticipate the claimed ranges at points outside the top surface of the instant liner. It is interpreted herein that these claimed weight percentage ranges apply to everywhere in the claimed liner but the top surface of the claimed liner, as this is the only manner of claiming the weight percentages that would make the ranges consistent with claim 1 from which claim 22 depends. If there is a design need or a market pressure to solve a problem, and there are a finite number of identified, predictable solutions, a person of ordinary skill in art has good reason to pursue known options within his or her technical grasp, and if this leads to anticipated success, it is likely product of ordinary skill and common sense, not innovation.

5. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker ('538) in view of Fell (U.S. Patent Application Publication No. 2004/0253894).

With respect to **Claim 18:** Becker does not teach a peak-to-valley depth. Fell teaches an absorbent nonwoven material containing either hydrophilic or hydrophobic material and containing a series of machine direction peaks and valleys spaced apart from each other in the cross direction. The peak-to-valley depth of the elongated MD peaks and valleys taught by Fell

is 3 mm, or between about 0.1 mm and about 0.5 mm. ('894, ¶¶0203,0204) Fell teaches that the three-dimensional material in the form of bodyside liner 12 exhibits improved intake and rewet performance characteristics, therefore it would be obvious to one of ordinary skill in the art to modify the article of Becker such that the depressed areas have a peak-to-valley depth as taught by Fell to impart improved intake and rewet performance to the outer cover layer and the article.

With respect to **Claim 19:** The peak-to-valley depth of the elongated MD peaks and valleys taught by Fell is 3 mm, or between about 0.5 mm and about 3 mm. ('894, ¶¶0203,0204) The motivation to combine the teachings of Becker and Fell is stated *supra* with respect to claim 18.

With respect to **Claim 20:** Becker does not teach a peak-to-peak separation of the elongated MD peaks relative to the cross direction. The peak-to-peak separation of the elongated MD peaks relative to the CD in the liner material 12 taught by Fell is 2 mm, or between about 0.5 mm and about 3 mm. ('894, ¶¶0203,204) The motivation to combine the teachings of Becker and Fell is stated *supra* with respect to claim 18.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELANIE J. HAND whose telephone number is (571)272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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